# CONSULTATION/LIAISON PSYCHIATRY*

BEATRIX A. HAMBURG, M.D.
Professor of Psychiatry and Pediatrics
The Mount Sinai School of Medicine of the City University of New York
New York, New York

DESPITE a distinguished history in psychiatry, consultation/liaison continues to be one of the less defined and understood aspects of psychiatry. As psychiatry moves to a more medical model, consultation/liaison can make major contributions to the training of all psychiatrists by providing knowledge and perspectives that will undergird acquisition of the necessary biopsychosocial expertise. Therefore, this discussion is of particular relevance in thinking about future careers in psychiatry. In addressing the nature and scope of the issues, I shall discuss the history, definitions, tasks, and tools of consultation/liaison. My concluding remarks will focus on the importance of consultation/liaison for research, education, and clinical practice.

## HISTORY

The essence of the most modern concepts of consultation/liaison lies in integration of the biomedical and behavioral sciences to enhance the understanding of health status and to promote positive health outcomes of patients. This fusion of the mind-body dichotomy into a unitary view is viewed as a modern concept but is really quite ancient. In the ancient Chinese, Hindu, and Egyptian cultures all disorders whether physical or mental were seen as unitary and caused by gods or evil spirits.[1] Treatments were equally undifferentiated, physical treatments such as trephining the skull were done for both physical and mental aberrations, and priestly rituals were similarly aimed at changing undesirable behavior or to rid the body of disease. A less magical, more rational form of unitary thinking also characterized the Hippocratic

*Presented as part of a *Symposium on Career Opportunities in Child and Adolescent Psychiatry* held by the Section on Psychiatry of the New York Academy of Medicine with the New York Council on Child Psychiatry and the Society for Adolescent Psychiatry at the Academy February 6, 1986.

This work was supported in part by NIMH Grants MH-32212 and MH-40177, by a grant from Stallone Fund for Autism Research, and aided by Social and Behavioral Sciences Research Grant No. 12-108 from March of Dimes Birth Defects Foundation.

medical tradition in which both mental and bodily conditions were seen as determined by the status of the various bodily humors such as blood, bile, and phlegm.[2]

With the advent of the Renaissance and the rise of rationalism and scientific medicine, there arose a concept of mind-body dualism that has been a profound and pervasive influence on medicine ever since. Even at the present time there are physicians who believe that the role of the psychiatric consultant is to diagnose whether or not a condition such as intractable headache, pain, or vomiting is *real,* meaning a disturbance of the body, or is mental and represents a disturbance of the mind.

The resolution of this dualism was not aided by the pioneers in psychosomatic medicine who began to postulate personality and behavior as causes of certain medical diseases of elusive etiology. Illnesses such as asthma, ulcer, hypertension, ulcerative colitis were prime examples. In the initial work of Flanders Dunbar[3] these diseases were linked with clusters of overt behaviors and "personality types." When this model failed to be validated, such psychoanalysts as Alexander and French[4] postulated that the psychosomatic diseases were related not to the specific overt behaviors but to specific underlying unconscious conflicts. To their credit, they tested their theories in well-designed and rigorous studies. Under this scrutiny, the hypotheses could not be proved. Their approach, as well as Dunbar's, was based on a linear model. It was assumed that personal psychological factors were causative, that the cure would lie exclusively within the patient's mental processes and that cure would depend on resolving psychological conflicts through individual psychotherapy. This model of personal psychotherapy for these "psychosomatic" disorders has been enormously influential. Unfortunately, this work contributed to the perpetuation of the stereotype that some diseases are *physical* in cause and others are *mental.* Nonetheless, much interest in psychosomatic disorders was generated and it became an area of continuing active research.

Fairly soon thereafter, the exciting meticulous studies of Mirsky, Wiener, and colleagues[5] launched a new *interactive model* of psychosomatic disorder that integrates mind and body as parts of an interrelated functional system. The prototype of this approach was in the classic peptic ulcer study in which both biomedical risk factor (pepsinogen level) and psychological vulnerability (specific response to stress) interacted to produce peptic ulcer under the stressor conditions of army basic training camp. This classic work laid the groundwork for the biopsychosocial model of disease that represents

a basic tenet of contemporary consultation/liaison. This model has been stated well in a classic paper of George Engel.[6]

Over the ensuing three decades gains were consolidated. On the biomedical side, there has been an explosion of research in neurobiology of behavior, and more recently with exciting leads as to the links between behavior, neurophysiology, and immune function.[7,8] On the behavioral side there have been major advances as well. Diagnostic criteria have been codified on a systematic basis in DSM III[9] so that there is now far greater clarity and consistency than ever before in diagnosis and in characterizing the psychiatric status of patients.

Psychologists in the field of social learning developed new paradigms for management of health relevant behaviors using principles of operant conditioning. The work of Neal Miller[10] showed that not only "voluntary" conscious behaviors but also the circulatory system and other visceral organs were susceptible to conditioned modification of their functioning. This has become an active area of research, and some effective treatments based on these principles have evolved such as biofeedback, meditation, and behavior modification regimens. A new promising line of research[11] suggests that immunosuppression in rats can be learned through operant conditioning. There are important new insights from *medical sociology* regarding the relationship of life events to illness, health belief systems as an influence on medical outcomes, factors determining whether or not the sick role is adopted.

Finally, over the past three decades there have been remarkable advances in psychopharmacology and in the field of psychiatry in general.

Within psychiatry a burgeoning research field on the biology of behavior has arisen. The biologic concomitants of schizophrenia and the major affective disorders have been at the center of these studies but are by no means the exclusive targets of study. This frontier of research is very exciting and one in which the unity of mind and body is being more clearly defined and better understood.

## Definitions

Given this background, what now are the current definitions of consultation/liaison?

Before attempting to answer that question, a brief discussion of the prevailing attitudes and skills of our colleagues in clinical medicine and pediatrics is needed. Since the rise of effective new therapies including antibiotics, hormone replacements, antineoplastic medication and an array of biotechnological advances, modern medicine has been "disease" and not "illness"

oriented. Using their formidable arrays of specific treatments, biomedical techniques, and the knowledge base of molecular biology, remarkable cures of traditional diseases and epidemic killers became possible. In the process physicians, however, were more concerned with diagnosing and treating laboratory values, symptoms and organs rather than with treating or for that matter even talking with the patient.

Indeed, over the last 50 years there have been remarkable gains in the medical outcomes. It is fair to say that, with the notable exception of those in pockets of poverty, the population is far healthier today than ever before. There is, however, a paradox of success. A new phase of medical practice is emerging in which the challenge of the acute diseases and infections that were the former burden of death and illness has given way to the situation in which the new burden of illness is heavily comprised of those *residual* disorders that we can treat but cannot cure. More than ever, the *chronic incurable* diseases and not the *acute curable* disorders comprise our patient population. In the management of chronic illness the patients' (and their families') attitudes, knowledge and collaboration are intimately bound up with the degree of success or failure of therapy. For such conditions as diabetes or survivors of cancer or organ transplant, good medical care now involves attention to the biology and the socioenvironmental context of the patient. In pediatrics the shift in the burden of illness has an additional aspect. In the words of Haggerty, there is a "new morbidity" in pediatrics. Increasingly, pediatricians are confronted by the need to treat impairments of their patients that relate to developmental disabilities, behavioral, learning, and other psychosocial problems. Pediatricians also have a large share of patients with traditional chronic medical disorders.

In the mainstream of medicine there has been minimal, if any, training to prepare physicians for the changed profiles of their current patient populations and the new repertoire of skills required. New dilemmas are increasingly faced by physicians who often find themselves baffled, angry, or helpless and in need of help with their patients. There are clear links between these dilemmas and the roles of consultation/liaison psychiatry.

Consultation and liaison will be defined separately, although the two roles *often,* but not necessarily, do coexist.

*Consultation* typically refers to the response by a psychiatrist to a request from a medical colleague for expert diagnostic and therapeutic advice regarding the behavior and psychological status of an *individual* patient. Operationally, therefore, the psychiatric consultant deals with the complexities of the individual patient and integrates the relevant biomedical and psychoso-

cial factors. A psychiatric or psychosocial diagnosis is made and recommendations are given concerning a treatment approach and regimen. Basically, consultees have sought help because they do not know what is wrong or they feel incapable of dealing with the problem as identified by them.

*Liaison* refers to interventions of the psychiatrist at a *systems* level. Diverse kinds of interventions may be involved. The psychiatrist may link with members of the professional medical team for effective collaboration on treatment goals. In doing so there may be interpretation of patient's behavior to allay anxiety or deal with hostility or distrust by medical staff. Often the issues surrounding the patient can be reframed so that new perspectives are gained. There is a strong educational component in which the liaison phychiatrist enhances the behavioral skills and knowledge of the staff. Finally, there is the research component in which the psychiatrist, usually in collaboration with a medical colleague, investigates issues that are at the biomedical/behavioral interface.

A systems, or liaison, approach is particularly important in pediatric psychiatry consultation/liaison. There are many reasons to work directly with the pediatric health professionals. First, there is a tendency for the staff to develop powerful attachments and counter-transference reactions toward the children. Second, the role of the social climate of the medical setting and the behaviors of the therapeutic team are crucial to the health outcomes of the child and parent. When these processes are clarified they often are readily seen and accepted by the medical staff. The responses by the parents to the medical staff and reactions of the staff to the parents are equally strong. Third, for children with long-term diseases, care must include developmental concerns and attention to long-term effects on all aspects of growth and development as well as attention to the efficacy of immediate interventions. Because sick children are more clearly embedded in a psychosocial context in which their home, school, and medical lives are closely intertwined, a liaison or systems approach is required.

In all of these facets of the roles and responsibilities of the consultation/liaison psychiatrist there is an underpinning of commitment to comprehensive care of the patient and integration of the most up-to-date knowledge of the biomedical and the behavioral and social sciences.

## TASKS

In *consultation* the task is more clear-cut. The psychiatric consultant responds to a request (usually written) expressing concerns or asking spe-

cific questions about a particular patient. The consultant is expected to respond promptly by seeing the patients, reading the medical record, talking with relevant medical personnel and family. Even in an individual consultation, subtly, the consulting psychiatrist expands from the patient focus to include the physician, staff, and family. A written report is prepared that is a physician-to-physician communication. At the same time it is part of a public record and gives advice to house staff and nurses concerning the care of the patient. Very often this advice becomes translated into official orders by the medical staff.

To fulfill these multiple functions effectively, the consultation note in the medical chart must have the attributes listed in Table I. Finally, the consult note should be *legible* and signed *legibly* with a telephone number so that the consultant signals availability and professional responsibility.

This relatively brief note thus reflects a high degree of effort, expertise, and integrative ability. At Mount Sinai a computerized database has been developed that captures the consultation experience comprehensively and yet with maximal efficiency. This computerized database has been found helpful in organizing the large quantity of relevant data entailed in each consultation. The checklist format assures that no potentially important data are inadvertently missed. Consultation/liaison records are now prompt, more complete, and more uniform. The computer will print out a chart note based on the items entered. The consultation/liaison staff finds that after minimal practice they can complete the database in about 15 minutes.

## Liaison Tasks

Psychiatric consultation can and often does occur without liaison. The prevalence of liaison services is more limited and tends to occur chiefly in major academic medical centers. It is therefore a frontier of psychiatry that can be predicted to grow.

Mount Sinai has historically been at the forefront of liaison psychiatry. Under M. Ralph Kaufman, one of the earliest and most successful models of liaison psychiatry was developed.[13] In this model, voluntary, part-time, senior psychiatrists were active in providing a cohesive and well-articulated program that had a critical role in establishing the efficacy of the field and served as a model program that was emulated in other centers. Over the years the pattern pioneered at Mount Sinai has changed and expanded to a full-time liaison psychiatry team. Currently, at Mount Sinai Dr. James Strain heads the adult consultation/liaison service and continues the tradition of

TABLE I. REQUIREMENTS FOR A PSYCHIATRIC CONSULTATION NOTE

1) *Promptness*—The information is urgently needed.
2) *Clarification* of the request—which has often been vague
3) *Psychiatric assessment*—focus on the key issues in a concise, clear and jargon-free write-up
4) Review and integration of past history with recent life events; elucidation of characteristic behavioral styles and defenses
5) Formulation of problem including a formal DSM III diagnosis on all five axes
6) Recommendations that include:
   a) General approach to patient based on personality structure
   b) Specific suggestions for management of patients which may include:
      *Symptom relief*—for example, children are often undermedicated for pain in hospitals
      *Change in procedures*—often to give patients more choice and involvement in their regimen to overcome feelings of helplessness and dependency
   c) Psychotropic medications, if any are to be administered
   d) Psychotherapy—individual, family, group
   e) *Play activities*—(child-life) for several purposes
      *Therapeutic*—play sessions to work through anxieties
      *Recreational*
      *Educational*
   f) Psychiatric hospitalization

strong leadership in the continuing development of the field. It was Strain and his colleagues who developed the basic concepts of the computerized database and who originally demonstrated its great potential for clinical service, training, and research.

## TRAINING

The acquisition of the tools to carry out the tasks of consultation/liaison is an incremental process. There are three basic components. First is good basic medical training. Many psychiatry fellowships now include internship in medicine or pediatrics as an integral part of the program. In addition to this general medical background there is a specific focus later, while engaged in consultation/liaison, on familiarity with diseases with associated psychological symptoms. These would include many neoplastic, endocrine, and metabolic disorders, and especially those disorders associated with the range of brain lesions.

A second component is broad exposure to the knowledge bases of the behavioral and social sciences. The contributions of epidemiology, anthropology, child development, social psychology, sociology, and, increasingly, ethics must be a part of the training curriculum in addition to a thorough grounding in clinical psychiatry.

TABLE II. SPECIFIC SKILLS DEVELOPED IN CONSULTATION/LIAISON

1) Sharper diagnostic interviewing skills, especially in the context of a time-limited contact and expertise in the teaching of interviewing skills to medical colleagues
2) Diagnostic reasoning skills
   Learn to focus on, organize and evaluate knowledge about the multiple levels of needed psychosocial data.
   a) Personal—early, previous, and current life experiences
   b) Psychological functioning
   c) Social functioning—school, peers, work
   d) Cultural influences
3) Physician-patient relationships are assessed as an important aspect of patient response and health outcome.
4) Familiarity and confidence in working in a hospital setting is gained, and working relationships with the medical staff are established.
5) Principles of organizational psychology are learned and can be applied to understand the dynamics of the system operating in the hospital milieu. The skills developed make it possible to intervene successfully in changing the system.
6) Crisis intervention skills are practiced. Unexpected adverse surgical outcomes, threatened suicide, aggressive outbursts, distraught parents can pose challenges beyond the coping capacity of a medical department.
7) Opportunity to broaden the range and repertoire of psychosocial and behavioral interventions (biofeedback, visual imagery, behavior modification, peer-therapy groups for medical patients, play therapy group, hypnosis, brief psychotherapy, etc.)

The third component, and most specific to consultation/liaison, is training in adopting a transactional, biopsychosocial approach to health status. A sizeable body of new knowledge has been accumulating in this area. Consultation/liaison also offers the opportunity to integrate prior learning in the biomedical and the behavioral and social sciences. The specific skills developed in consultation/liaison are outlined in Table II.

## RESEARCH

Activities in consultation/liaison open up rich opportunities for collaborative research. The existing research in this field is meager in relation to the opportunities that exist. Important clinical contributions can be made in areas of psychosocial antecedents and correlates of illness, factors that influence adherence to medical regimens and responsible self-care, death and dying, psychological responses to new medical technologies such as renal dialysis. Areas of more basic research include elucidation of psychoendocrine systems and studies of mechanisms of immunosuppression in relation to psychological stress. My own work at Mount Sinai is a prospective longitudinal study of the interplay of psychological, endocrine, and immune responses that may determine decompensation to overt disease (appearance of diabetes)

in a population of children at genetic high risk by HLA markers for Type I diabetes mellitus.

## CAREER

Clearly, the winds of change are blowing in medicine. This is especially clear in psychiatry. The field seems to be redefining itself and moving toward a more medical model. To do so and still to preserve the essential psychiatric contributions of broad understanding of human behavior is the critical task. The kinds of values, knowledge, and skills taught and practiced in consultation/liaison represent a model of the appropriate synthesis. Within the traditional very broad definition of psychiatry there are specific components that can be performed by a social worker, behavioral psychologist, or a marital counselor. These professionals and others are asserting claims. However, no other professional has the unique combination of mastery of the full *range* of psychological and medical treatment modalities and the combined medical/behavioral professional training which, taken together, are such a broad and integrated knowledge base and professional resource.

It was noted earlier that, as medical practice has changed, with a new burden of illness, practitioners are in greater need than ever before of the expertise of psychiatrists. Skill and familiarity in working with these colleagues offer the opportunity for useful collaborative teamwork and becomes a source of interesting patients.

In this regard, consultation/liaison is an area that is intrinsically satisfying. It offers great variety, challenge, and intellectual excitement.

In conclusion, Engel has stated it well: "It is mainly upon psychiatrists. . .that the responsibility falls to develop approaches to the understanding of health and disease and patient care not readily accomplished within the more narrow framework and with the specialized techniques of traditional biomedicine."[6] This is the same challenge and responsibility that is the core of consultation/liaison psychiatry.

## *REFERENCES*

1. Sigerist, H.E.: *A History of Medicine*, vol. 1. New York, Oxford Press, 1951.
2. Zilboorg, G.: *A History of Medical Psychology*. New York, Norton, 1967.
3. Dunbar, F.: *Emotions and Bodily Changes*. New York, Columbia University Press, 1954.
4. Alexander, F.: *Psychosomatic Medicine*. New York, Norton, 1950.
5. Weiner, H., Thaler, M., Reiser, M.F., and Mirsky, I.A.: Etiology of duodenal ulcer: Relation of specific psychological characteristics to rate of gastric secretion (serum pepsinogen). *Psychosom. Med.*

*19:*1-10, 1959.
6. Engel, G.L.: The need for a new medical model: A challenge for biomedicine. *Science 196:*129-36, 1977.
7. Stein, M., Schiavi, R., and Camierino, M.: Influence of brain and behavior in the immune system. *Science 191:*435, 1976.
8. Paclidis, N. and Chirigos, M.: Stress-induced impairment of macrophage tumoricidal function. *Psychosom. Med. 42:*47-54, 1980.
9. *Diagnostic and Statistical Manual of Mental Disorders,* 3rd edition. Washington, D.C., American Psychiatric Association, 1980.
10. Miller, N.E.: Learning of visceral and glandular responses. *Science 163:*434-45, 1969.
11. Ader, R. and Cohen, N.: Behaviorally conditioned immunosuppression. *Psychosom. Med. 37:*333-40, 1975.
12. Becker, M.H., Haefner, D.P., Kasl, S.V., et al.: Selected psychosocial models and correlates of individual health-related behaviors. *Med. Care 15:*27-46, 1977.
13. Kaufman, M.R. and Margolin, S.G.: Theory and practice of psychosomatic medicine in a general hospital. *Med. Clin. North Am. 32:*611-16, 1948.